

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): An information recording/reproducing apparatus for reproducing an address indicative of a recording position on a recording medium from the recording medium on which address data obtained by modulating the address in at least two modulation schemes different from each other are recorded, said apparatus comprising:

a demodulator for performing a demodulation processing on a read signal read from said recording medium corresponding to each of the modulation schemes to generate an address data signal for each demodulation processing;

a combining part for combining the respective read signals generated for the respective demodulation schemes with one another at combination ratios different from one another to generate a plurality of combined address data signals;

an error corrector for performing error correction processing on each of the combined address data signals to generate a corrected address data signal corresponding to each of the combined address data signals; and

an address output part for selectively outputting the corrected address data signal corresponding to the address data signal having the lowest error ratio among the address data signals as a reproduced address.

2. (original): An information recording/reproducing apparatus according to claim 1, further comprising:

an error detector for performing error detection processing on each of the address data signals to generate an error detection result signal including an error ratio of each of said address data signals, and information indicating whether or not each of the address data signals can be corrected by said error corrector,

wherein said an address output part includes:

a determining part for determining based on the error detection result signal an address data signal which is correctable and has the lowest error ratio from said address data signals; and

a selector for selecting a corrected address data signal corresponding to the address data signal determined by said determining part from said corrected address data signals to output the corrected address data signal selected thereby as the reproduced address.

3. (withdrawn): An information recording/reproducing apparatus for reproducing an address indicative of a recording position on a recording medium from the recording medium on which the address data obtained by modulating the address in at least two modulation schemes different from each other are recorded, said apparatus comprising:

a demodulator for performing a demodulation processing on a read signal read from said recording medium corresponding to each of the modulation scheme to generate an address signal for each demodulation processing;

a combining part for combining the respective read signals generated for the respective demodulation schemes with one another at combination ratios different from one another to generate a plurality of combined read address signals;

an address generating part for performing a binary determination on each of the combined read address signals to generate an address data signal;

an error corrector for performing error correction processing on each of the address data signals to generate a corrected address data signal corresponding to each of the address data signals; and

an address output part for outputting the corrected address data corresponding to the address data signal having the lowest error ratio among said address data signals as a reproduced address.

4. (withdrawn): An information recording/reproducing apparatus according to claim 3, further comprising:

an error detector for performing error detection processing on each of the address data signals to generate an error detection result signal including an error ratio of each of said address data signals, and information indicating whether or not each of the address data signals can be corrected by said error corrector,

wherein said address output part includes:

a determining part for determining based on the error detection result signal an address data signal which is correctable and has the lowest error ratio from said address data signals; and

a selector for selecting a corrected address data signal corresponding to the address data signal determined by said determining part from said corrected address data signals to output the corrected address data signal selected thereby as the reproduced address.

5. (original): An information reproducing method for reproducing an address indicative of a recording position on a recording medium from the recording medium on which address

data obtained by modulating the address in at least two modulation schemes different from each other are recorded, said method comprising:

a demodulating step for performing a demodulation processing on a read signal read from said recording medium corresponding to each of the modulation schemes to generate an address data signal for each demodulation processing;

a combining step for combining the respective read signals generated for the respective demodulation schemes with one another at combination ratios different from one another to generate a plurality of combined address data signals;

an error correcting step for performing error correction processing on each of the combined address data signals to generate a corrected address data signal corresponding to each of the combined address data signals; and

an address outputting step for outputting the corrected address data signal corresponding to the address data signal having the lowest error ratio among the address data signals as a reproduced address.

6. (original): An information reproducing method according to claim 5, further comprising:

an error detecting step for performing error detection processing on each of the address data signals to generate an error detection result signal including an error ratio of each of said address data signals, and information indicating whether or not each of the address data signals can be corrected,

wherein said address outputting step includes:

a determining step for determining based on the error detection result signal an address data signal which is correctable and has the lowest error ratio from said address data signals; and

a selecting step for selecting a corrected address data signal corresponding to the address data signal determined in said determining step from said corrected address data signals to output the corrected address data signal selected thereby as the reproduced address.

7. (withdrawn): An information reproducing method for reproducing an address indicative of a recording position on a recording medium from the recording medium on which address data obtained by modulating the address in at least two modulation schemes different from each other are recorded, said method comprising:

a demodulating step for performing a demodulation processing on a read signal read from said recording medium corresponding to each of the modulation schemes to generate an address signal for each demodulation processing;

a combining step for combining the respective read signals generated for the respective demodulation schemes with one another at combination ratios different from one another to generate a plurality of combined read address signals;

an address generating step for performing a binary determination on each of the combined read address signals to generate an address data signal;

an error correcting step for performing error correction processing on each of the address data signals to generate a corrected address data signal corresponding to each of the address data signals; and

an address outputting step for outputting the corrected address data corresponding to the address data signal having the lowest error ratio among said address data signals as a reproduced address.

8. (withdrawn): An information reproducing method according to claim 7, further comprising:

an error detecting step for performing error detection processing on each of the address data signals to generate an error detection result signal including an error ratio of each of said address data signals, and information indicating whether or not each of the address data signals can be corrected,

wherein said address outputting step includes:

a determining step for determining based on the error detection result signal an address data signal which is correctable and has the lowest error ratio from said address data signals; and

a selecting step for selecting a corrected address data signal corresponding to the address data signal determined in said determining step from said corrected address data signals to output the corrected address data signal selected thereby as the reproduced address.